

Attachment 9

Additional Evaluation of Projects with Freight Benefits

Memorandum

TO: County Congestion Management Agency

FROM: Michael Fischer, Cambridge Systematics on behalf of MTC

DATE: April 02, 2004

RE: MTC Goods Movement Study: Freight-benefits Project Information

This memorandum transmits information regarding projects that are currently under consideration for inclusion in the RTP Tier I, Big Tent, or ITIP funding recommendations by the CMAs. Projects that are selected for information under this memorandum are identified as being potentially beneficial to freight, and it is hoped the additional information provided with regard to their freight benefits would be useful in the project recommendation process. The Project Fact Sheets are found in Attachment 1 to this memorandum. Each project fact sheet contains the following information compiled from a variety of sources:

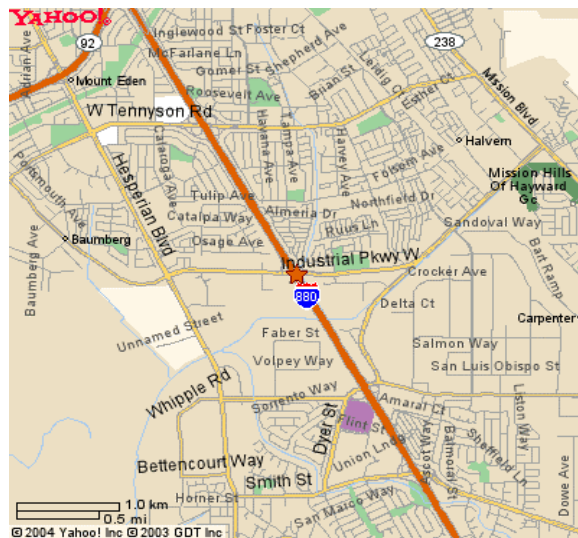
1. Project Title, Sponsor, Description, Project ID# and Location Map.
2. Checklist of Freight Issues Addressed by the Project.
3. Project Cost
4. Plot of number of freight-dependant businesses located immediately adjacent to project location that show the quantum of local businesses likely to directly benefit from its implementation obtained from InfoUSA.
5. Plot of relevant freight statistics: number and percentage of trucks, and type of trucks at project location or at nearest highway near project location that shows the magnitude of traffic at the present location from CalTrans Truck Counts.
6. Number of truck-related accident locations, as available, showing the number of instances of truck involvement in accidents from the California Highway Patrol database.
7. Congestion statistics forecast by MTC at the project location in 2025 in terms of Volume-to-Capacity-Ratio in the 2001 RTP AM peak period No Build scenario, which shows traffic conditions if the project is not built.
8. Summary of potential benefits due to the project based upon the above information.

Included as part of this memorandum is a summary of the Goods Movement Study and a description of emerging themes and strategies from this study in Attachment 2.

Attachment 1. Project Fact Sheets

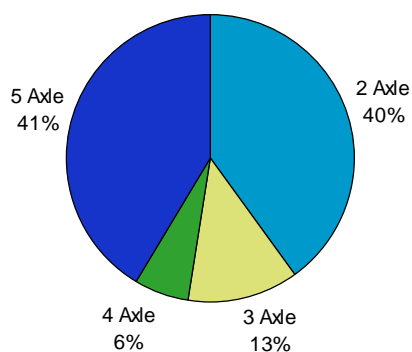
Alameda County**Project ID #:3****Project Title: I-880/Industrial Parkway Northbound Off-Ramp****Sponsor: City of Hayward****Project Cost: \$8.1 m****Project Description:****Constructing a northbound off-ramp from I-880 to Industrial Parkway.**

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

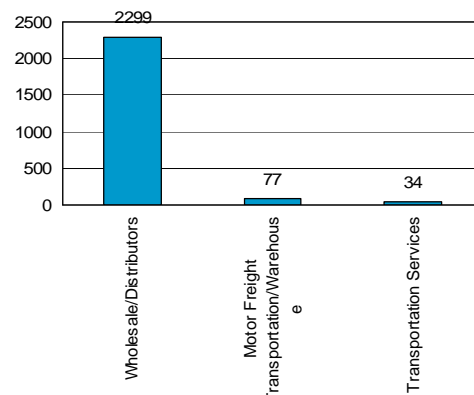
**Related Freight/Roadway Statistics:**

11859 Total Trucks/day

5.9 % of Total Traffic



Freight Reliant Businesses

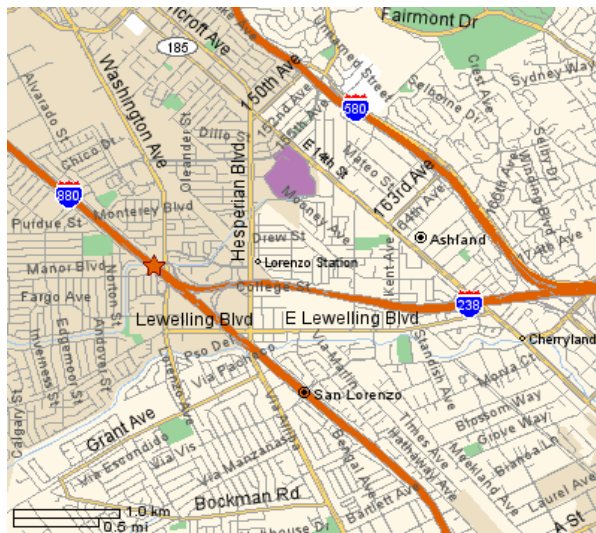
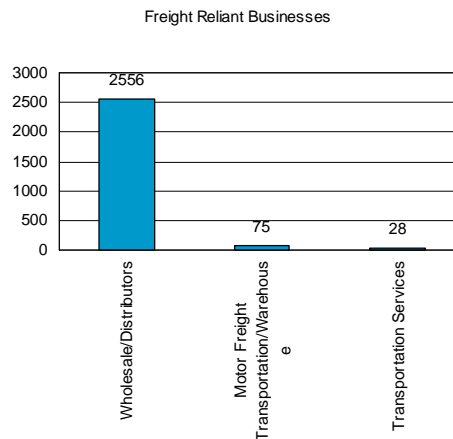
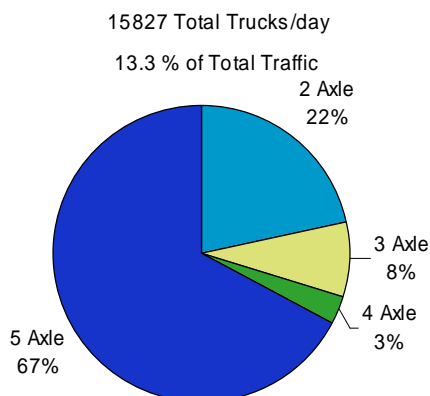
**Congestion (2025 no build v/c ratio): 0.99 or greater****Truck-Related Accidents: Not Available****Benefits of the Project:**

This project will relieve traffic congestion on I-880 and on Whipple Road by providing trucks a direct link from I-880 northbound to the industrial area. Given that trucks typically occupy almost twice the capacity compared to automobiles, any improvements would benefit traffic movement in the area. In addition, efficiency would be improved by providing direct access.

Alameda County**Project ID#: 36****Project Title: I-238/I-580 Truck Bypass Lane****Sponsor: Caltrans****Project Cost: \$120.4m****Project Description:**

Construct a truck bypass lane from I-580 to I-238; current configuration requires trucks to merge into I-238 on the left from I-580.

Freight Issue(s) Addressed	
	Intra-Regional Corridor
U	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:****Congestion (2025 no build v/c ratio):** >0.99 at I238/I580 interchange**Truck-Related Accidents:** Not Available**Benefits of the Project:**

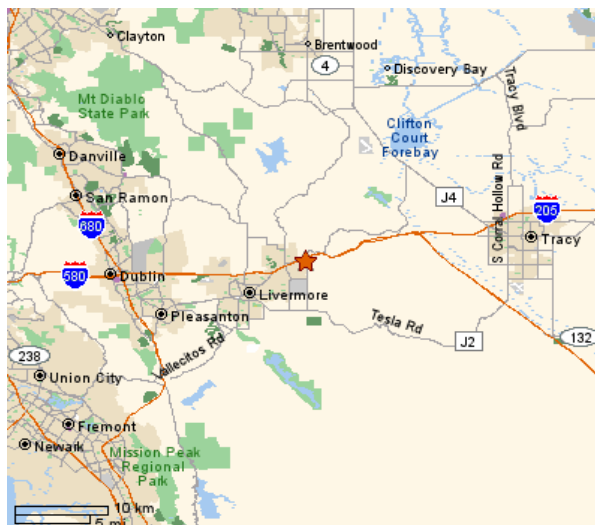
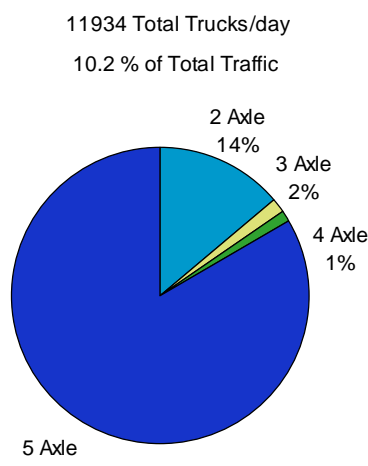
This project would benefit freight movement in terms of safety and capacity. Given the existing restrictions for trucks on I-580 in Oakland, the truck merging movements has ramifications on the safety as well as capacity of the corridors. Therefore this project has significant benefits in terms of safety and capacity.

Alameda County**Project ID#: 39****Project Title: I-580 Eastbound Truck Climbing Lane Over Altamont Pass**

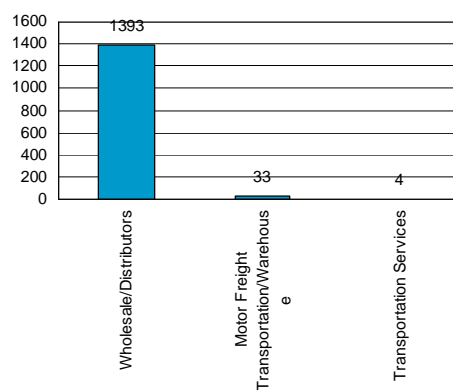
Freight Issue(s) Addressed	
	Intra-Regional Corridor
Ü	Inter-Regional Corridor
	Access to Int'l Gateway

Sponsor: Caltrans**Project Cost: \$65.0m****Project Description:**

Construct EB truck climbing lane from between Vasco Road and Greenville Road and the summit of Altamont Pass.

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

**Congestion (2025 no build v/c ratio): 0.8-0.9****Truck-Related Accidents: Not available****Benefits of the Project:**

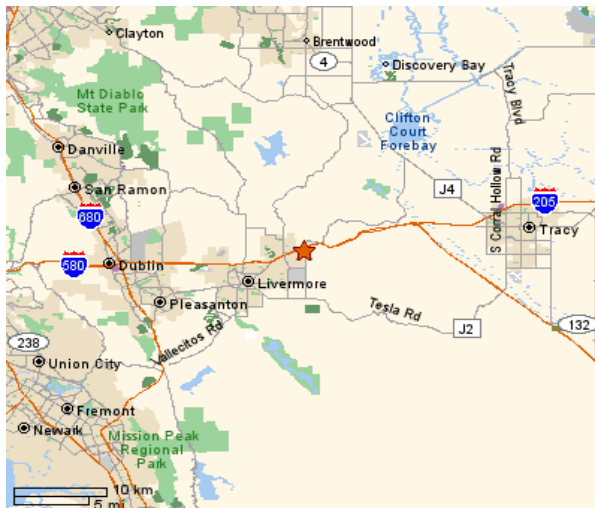
The project would separate trucks from other vehicles, while ascending a significant grade in a heavily-used truck corridor. Given that trucks ascending significant grades on roadways can occupy almost 4 times capacity compared to automobiles, the project has capacity benefits. Additionally, implementation of this project would have truck safety benefits.

Alameda County**Project ID#:41****Project Title: I-580 Westbound Truck Climbing Lane**

Freight Issue(s) Addressed	
	Intra-Regional Corridor
U	Inter-Regional Corridor
	Access to Int'l Gateway

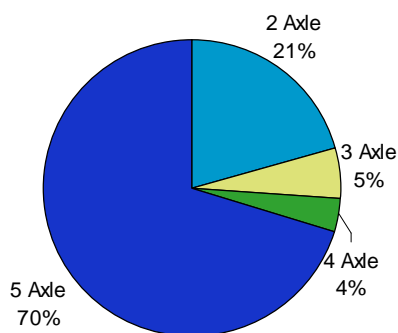
Sponsor: Caltrans**Project Cost: \$105.3m****Project Description:**

Construct truck climbing lane on I-580 westbound between the I-205/Hansen Road overcrossing and the summit of Altamont Pass.

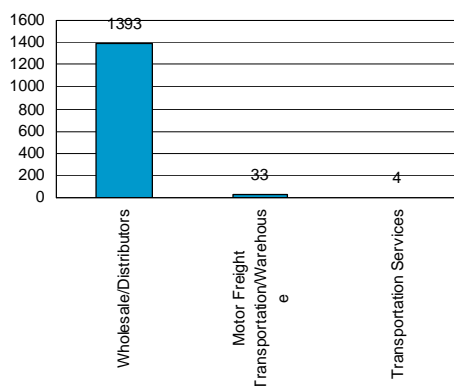
**Related Freight/Roadway Statistics:**

11786 Total Trucks/day

14.2 % of Total Traffic



Freight Reliant Businesses

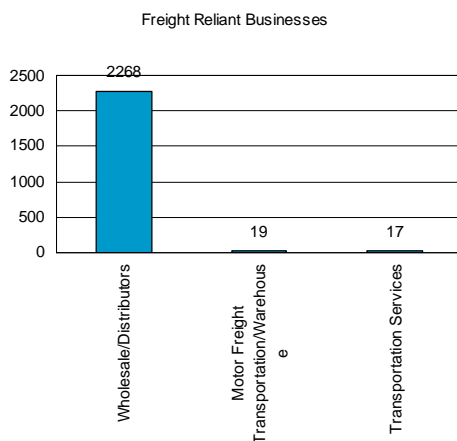
**Congestion (2025 no build v/c ratio): 0.8-0.9****Truck-Related Accidents: Not available****Benefits of the Project:**

Trucks ascending roadways with steep grades can occupy almost 4 times capacity as automobiles. With a high percentage of trucks in this corridor (almost 15%) and given that 0.8-0.9 of capacity would be occupied by the year 2025, this project has importance, both in terms of capacity as well as efficiency.

Alameda County**Project ID#: 47****Project Title: Clement Ave Extension Between Tilden
Way to Grand Avenue****Sponsor: City of Alameda****Project Cost: \$6.102m****Project Description:**

Signalization improvements, right-of-way acquisition, and new construction, as well as resurfacing of a segment between Broadway and Grand Street.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:****Congestion (2025 no build v/c ratio): Not available****Truck-Related Accidents: Not available****Benefits of the Project:**

The project would improve connection between Alameda and the nearby industrial area of almost 3,000 freight-reliant businesses. It will also provide a direct connection along the City of Alameda's northern truck route, which would improve efficiency in movement and possibly a reduction in truck VMT.

Alameda County**Project ID#: 65****Project Title: I-880/A Street interchange improvements****Sponsor: City of Hayward****Project Cost: \$13.8m****Project Description:**

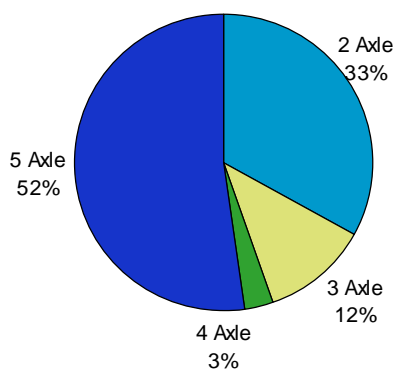
Provide for two continuous through lanes and one continuous left-turn lane in each direction on West 'A' Street between the I-880 southbound and northbound ramps.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

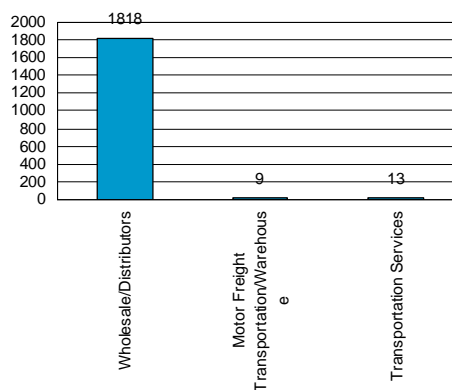
**Related Freight/Roadway Statistics:**

19301 Total Trucks/day

9.02 % of Total Traffic



Freight Reliant Businesses

**Congestion (2025 no build v/c ratio): 0.8-0.99****Truck-Related Accidents: Not Available****Benefits of the Project:**

The project would have capacity benefits on an arterial connecting to I-880 carrying a high volume of trucks around this location, half of them 5-axle large trucks. Given the industrial areas in the vicinity, this project would benefit the large number of warehousing and distribution businesses, as well by providing more efficient access.

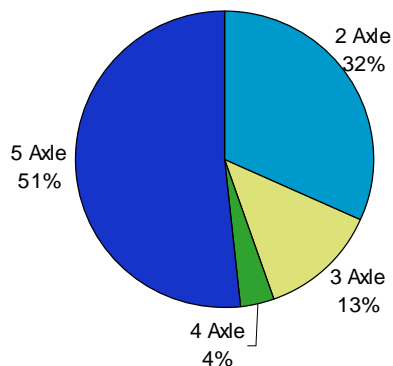
Alameda County**Project ID#: 75****Project Title: 29th/Fruitvale Area I-880 Access Improvements****Sponsor: City of Oakland****Project Cost: \$25.4m****Project Description:****Reconstruction of both on- and off-ramps from northbound and southbound I-880.**

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

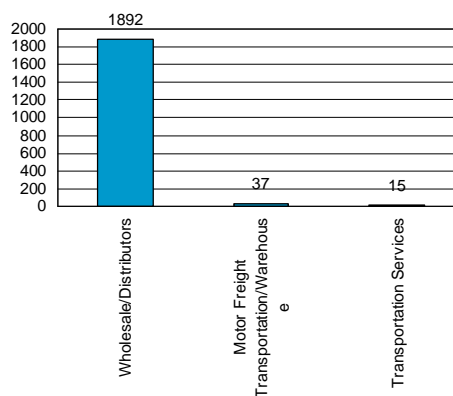
**Related Freight/Roadway Statistics:**

22791 Total Trucks/day

10.7 % of Total Traffic



Freight Reliant Businesses

**Congestion (2025 no build v/c ratio): > 0.99****Truck-Related Accidents: 8 in 2002****Benefits of the Project:**

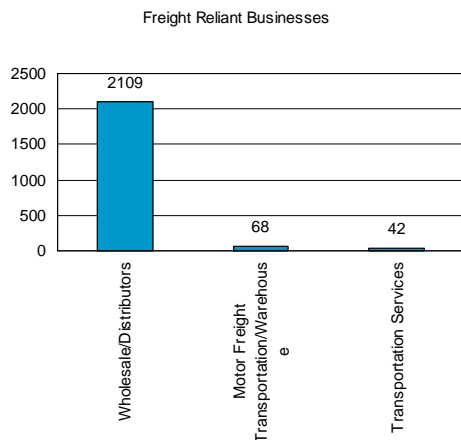
Given the high volumes of truck traffic at this location comparable to the I-710 corridor in Southern California, a majority of them large trucks, the implementation of this project would have significant benefits to freight and goods movement. The improvement of access to and from I-880 to the significant numbers of freight-reliant businesses would reduce congestion and improve safety.

Alameda County**Project ID#: 82****Project Title: Reconstruction of 7th St/Union Pacific Railroad (UPRR) Grade Separation**

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

Sponsor: Port of Oakland**Project Cost: \$50.9m****Project Description:**

Replace a grade separation in the vicinity of 7th Street where the UPRR tracks enter the Port's intermodal yards.

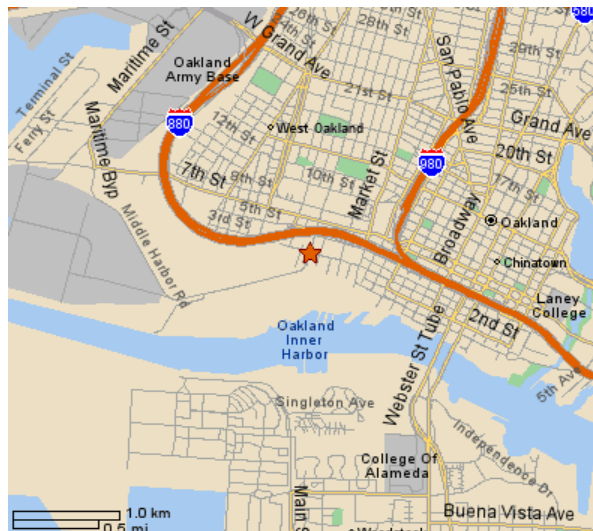
**Related Freight/Roadway Statistics:****Congestion (2025 no build v/c ratio): Not Available****Truck-Related Accidents: 18 in 2002 along 7th Street in Oakland****Benefits of the Project:**

The grade separation would result in improved safety and reduced travel times for large trucking and transportation service-related trucks at an important Port access route.

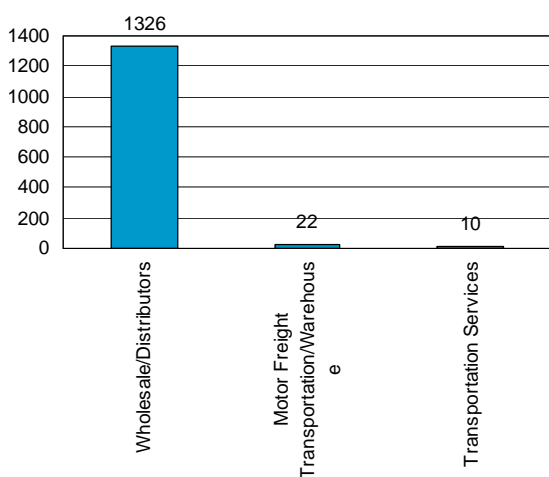
Alameda County**Project ID#: 83****Project Title: Reconstruction of the Adeline Street Overpass****Sponsor: Port of Oakland****Project Cost: \$35.6m****Project Description:**

Replace the existing Adeline Street overpass (over the railroad tracks at 3rd Street and Adeline Street) to reduce the grade of the overpass and improve structure so it can accommodate overweight trucks.

Freight Issue(s) Addressed	
ü	Intra-Regional Corridor
	Inter-Regional Corridor
ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

**Congestion (2025 no build v/c ratio):** Not Available**Truck-Related Accidents:** 2 at or near Adeline Street and I-880**Benefits of the Project:**

The project would improve Port access and overweight truck route and increase safety in an area with significant size and numbers of freight-reliant businesses.

Alameda County**Project ID#: 84****Project Title: Air Cargo (Infield) Access Road****Sponsor: Port of Oakland****Project Cost: \$10.6m****Project Description:**

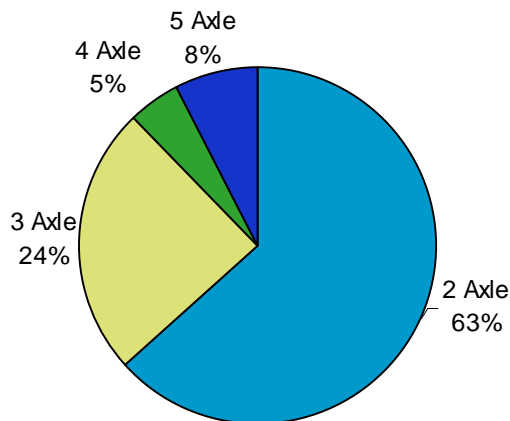
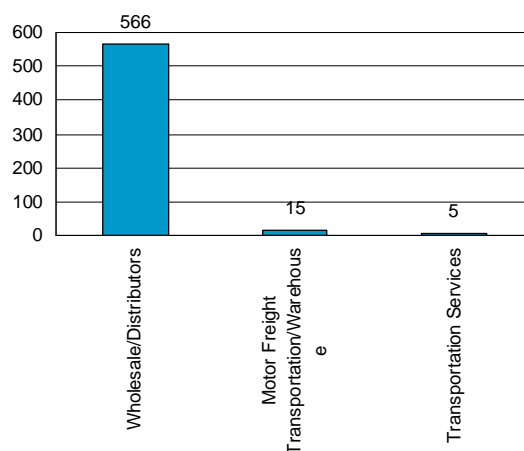
Widen and connect SR 61 (Doolittle Drive) with Earhart Road and extend into the Infield area at North Field.

Freight Issue(s) Addressed	
	Intra-Regional Corridor
	Inter-Regional Corridor
ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

1745 Total Trucks/day

6.84 % of Total Traffic

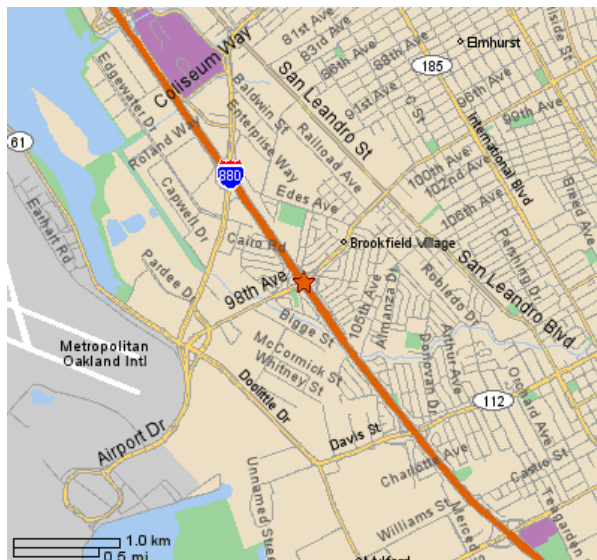
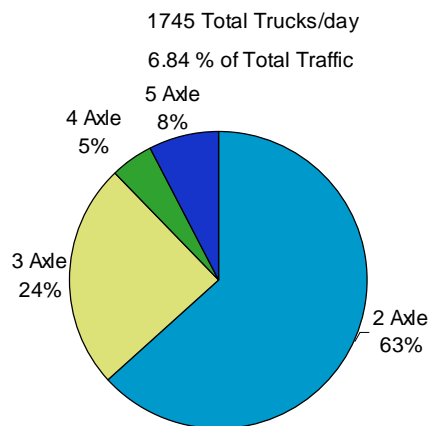
**Freight Reliant Businesses****Congestion (2025 no build v/c ratio): 0.8-0.9 along Doolittle Drive****Truck-Related Accidents: 9 in 2002 on Doolittle Dr and Earhart Rd.****Benefits of the Project:**

The project would provide access to undeveloped areas at Oakland International Airport (OAK) and would benefit the fast growing air cargo hub at OAK in the Bay Area.

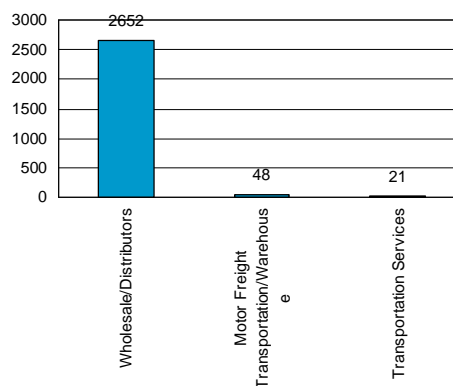
Alameda County**Project ID#: 85****Project Title: Oakland Airport Area ITS Project****Sponsor: Port of Oakland****Project Cost: \$15.0 m****Project Description:**

Design and implement ITS along 98th Ave and Hegenberger Rd from I-880 to OAK. This project would involve installation of CCTV cameras, vehicle detectors, dynamic message signs, transit priority, real-time traveler information displays, etc. to improve management of the corridors leading to/from OAK and the I-880/Coliseum area. This project would interconnect the signals along these routes to minimize delay and improve traffic flows, and provide the Port and City with centralized control for incident management. Real-time traffic-responsive systems would be considered.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

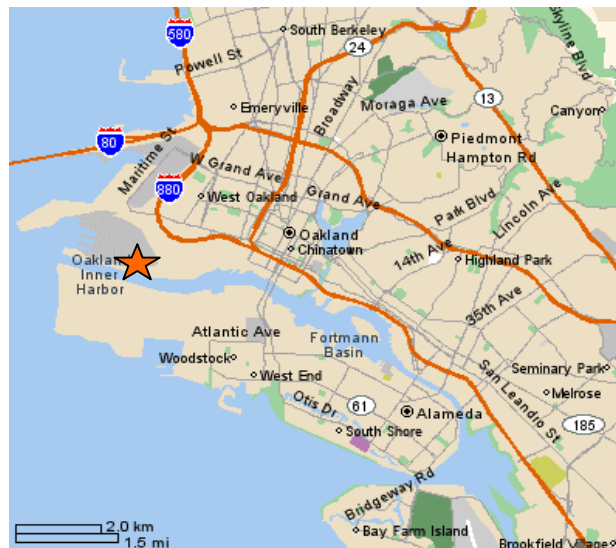
**Congestion (2025 no build v/c ratio):****0.8 to 0.99 on 98th and Hegenberger Road****Truck-Related Accidents:****24 in 2002 along 98th and Hegenberger Road****Benefits of the Project:**

ITS improvements would benefit OAK access to significant numbers of trucks traversing the arterial linkages to and from I-880. This would improve efficiency and benefit travel time to access the airport area as well as large numbers of freight-reliant businesses. The sponsor has estimated a 25% reduction in travel delay due to the signal coordination component.

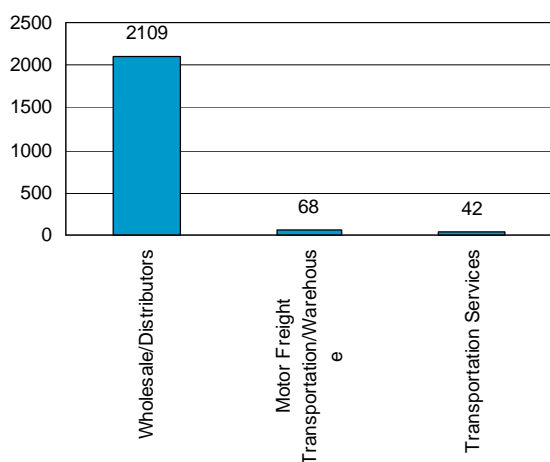
Alameda County**Project ID#: 86****Project Title: Joint Intermodal Terminal (JIT) Expansion****Sponsor: Port of Oakland****Project Cost: \$76.275m****Project Description:**

Capacity enhancements at the present JIT site and construction of support components at the Knight Yard located at the former Oakland Army Base. Proposed work includes additional container storage space, expanded utilities, and gate facilities.

Freight Issue(s) Addressed	
	Intra-Regional Corridor
Ü	Inter-Regional Corridor
Ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

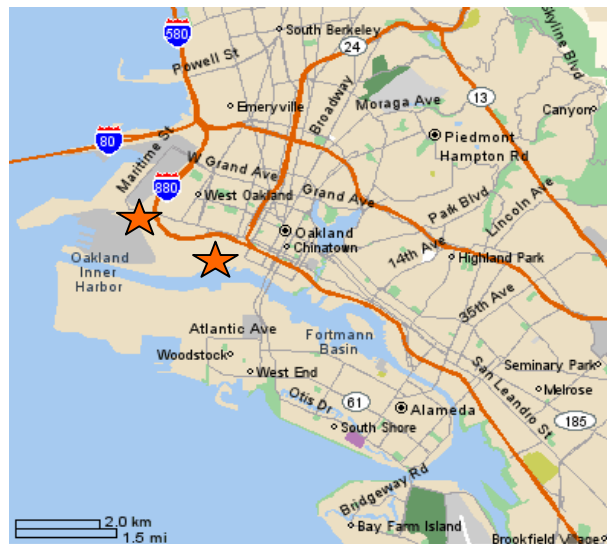
**Congestion (2025 no build v/c ratio): Not Applicable****Truck-Related Accidents: Not Available****Benefits of the Project:**

The project would increase the capacity of the existing intermodal terminal, thereby, improving mobility for intermodal containerized freight.

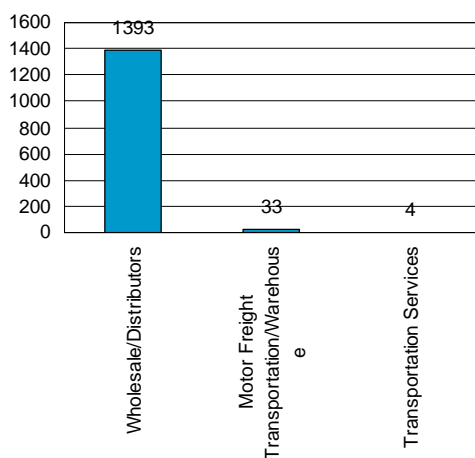
Alameda County**Project ID#:** N/A***Project Title:** ITS (Port of Oakland)**Sponsor:** Port of Oakland**Project Cost:** \$5.1**Project Description:**

This project will construct the infrastructure and variable message boards at three locations en route to the Port's maritime facilities. It is assumed that the Central Communications Center will be located at a facility in the Maritime Support Center area. The cost does not include the facility.

Freight Issue(s) Addressed	
	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

**Congestion (2025 no build v/c ratio):** Not Available**Truck-Related Accidents:** Not Available**Benefits of the Project:**

The project would aid in efficient access to the Seaport.

* Not listed in project evaluation because project cost is below threshold

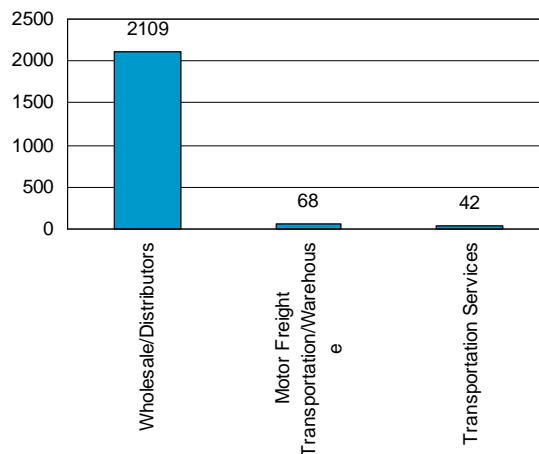
Alameda County**Project ID#: 89****Project Title: Realignment of Maritime Street****Sponsor: Port of Oakland****Project Cost: \$30.5m****Project Description:**

Realign Maritime Street and provide or improve access from the new road to the marine terminals and the JIT.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

**Congestion (2025 no build v/c ratio):** < 0.8**Truck-Related Accidents:** 2 in the year 2002**Benefits of the Project:**

The project would improve access to Port facilities. The realignment would improve safety for trucks accessing the road en-route to the Port.

Alameda County**Project ID#: 100****Project Title: Davis St/I-880 Overcrossing****Sponsor: City of San Leandro****Project Cost: \$10.2m****Project Description:**

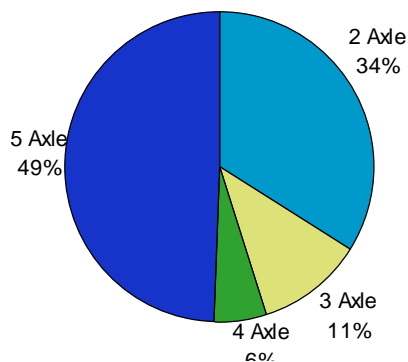
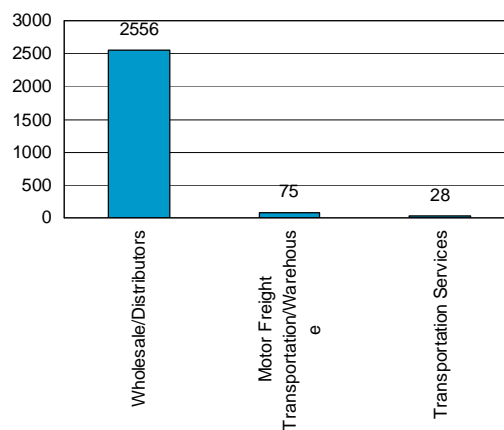
Replace existing overcrossing structure to provide higher clearance for I-880 traffic and additional travel lanes on Davis Street to improve capacity and safety, along with ramp, intersection, and signal improvements.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

24411 Total Trucks/day

11.25 % of Total Traffic

**Freight Reliant Businesses****Congestion (2025 no build v/c ratio): 0.8-0.9****Truck-Related Accidents: Not Available****Benefits of the Project:**

The project is critical in a location with high-truck volumes of 24,000 per day comparable to truck volumes on I-710 in Southern California; project is near about 2,700 freight-reliant businesses. The project would improve traffic conditions on an important freight corridor and improve freight efficiency.

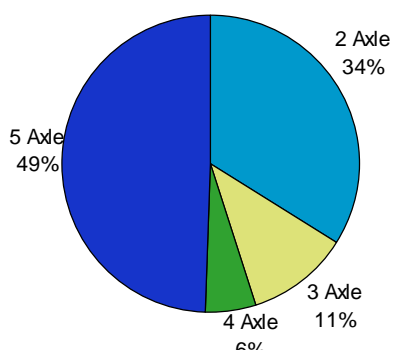
Alameda County**Project ID#: 101****Project Title: Marina Blvd/I-880 Overcrossing****Sponsor: City of San Leandro****Project Cost: \$8.0m****Project Description:**

Replace existing overcrossing with a new structure to provide higher clearance for traffic on I-880.

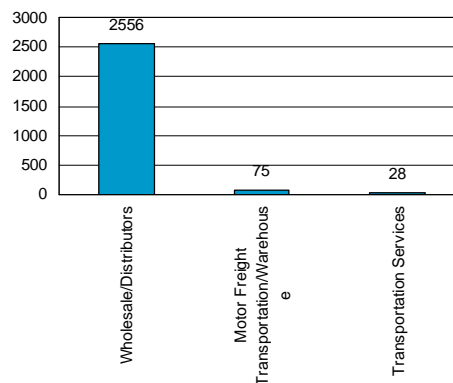
Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

24411 Total Trucks/day
11.25 % of Total Traffic



Freight Reliant Businesses

**Congestion (2025 no build v/c ratio): 0.8-0.99****Truck-Related Accidents: Not Available****Benefits of the Project:**

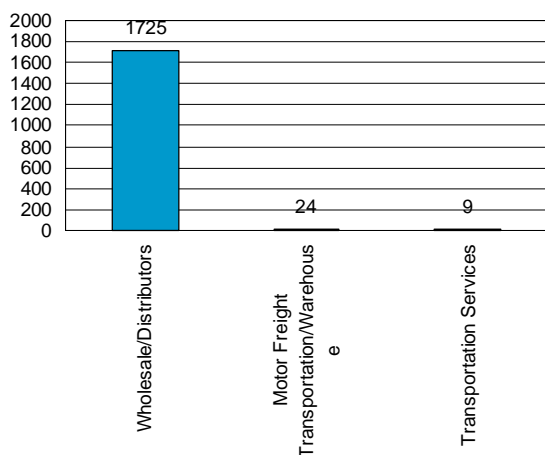
The project would benefit the large number of freight-related businesses at this location and the efficient movement of large numbers of truck traffic, especially large trucks on I-880 around this location.

Contra Costa County**Project ID#: 362****Project Title: Kirker Pass Road Truck Climbing Lane****Sponsor: Contra Costa County****Project Cost: \$7.1m****Project Description:****Add a truck climbing lane to Kirker Pass Road from Clearbrook Drive to Buchanan Road.**

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

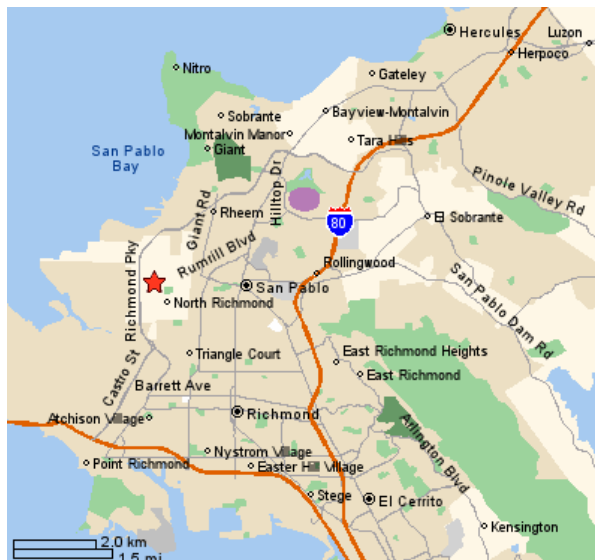
**Congestion (2025 no build v/c ratio):** <0.8**Truck-Related Accidents:** Not Available**Benefits of the Project:**

This project would improve capacity in addition to safety given that trucks ascending a roadway with significant grade can occupy up to four times the capacity of an automobile.

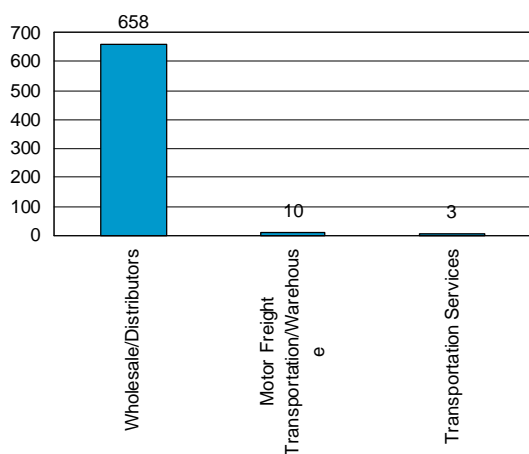
Contra Costa County**Project ID#: 370****Project Title: North Richmond Truck Route Project****Sponsor: Contra Costa County****Project Cost: \$20.0 m****Project Description:**

Extend Pittsburg Avenue and either Seventh Street or Soto Street in North Richmond to create a new truck route for access between the North Richmond industrial area and I-580.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

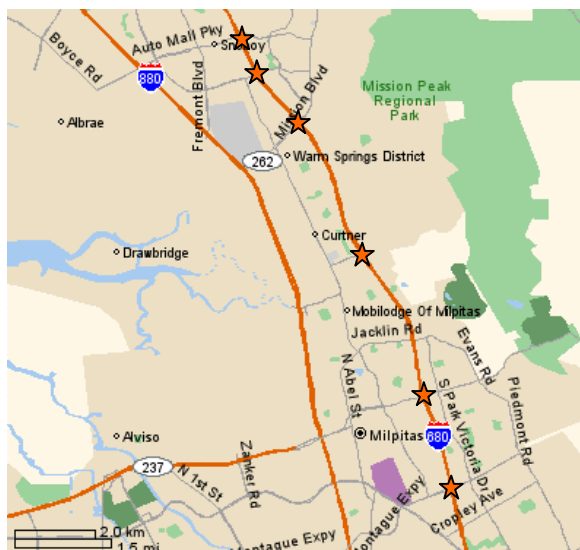
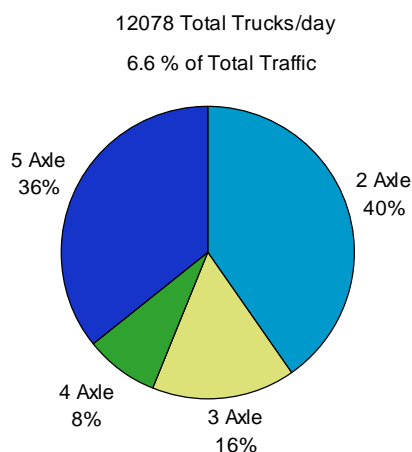
**Congestion (2025 no build v/c ratio):** < 0.8 on I-580**Truck-Related Accidents:** Not Available**Benefits of the Project:**

The project would provide improved access from the current truck route to a local industrial area in Richmond.

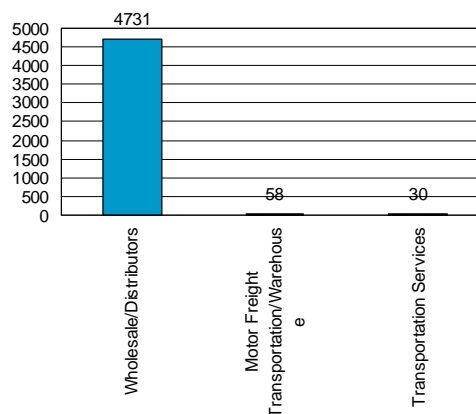
Alameda and Santa Clara Counties**Project ID#: 15/509****Project Title: I-680/I-880 Cross Connector Project****Sponsor: Multiple cities****Project Cost: \$400.0 m****Project Description:**

Improvements to the following six corridors, all of which extend between the two existing North South Freeways: 1) Auto Mall Parkway; 2) Fremont Road/Grimmer Boulevard; 3) Mission Boulevard /Warren Avenue; 4) Scott Creek Road/Dixon Landing Road; 5) Calaveras Boulevard; and 6) Montague Expressway. Improvements include roadway widening, grade separations, interchange operational and capacity improvements, creation of and improvements to HOV facilities, new freeway connections either below grade or elevated, roadway extensions and overcrossings, and TSM improvements.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
Ü	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

Freight Reliant Businesses

**Congestion (2025 no build v/c ratio): 0.9-0.99 in most locations****Truck-Related Accidents: Not Available****Benefits of the Project:**

This project would improve mobility options in an area with high-truck volumes and access to more than 4,500 freight-reliant industries.

Alameda and Contra Costa Counties**Project ID#: 88/510****Project Title: Railroad Corridor Improvements in
Alameda and Contra Costa County**

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

Sponsor: Port of Oakland**Project Cost: \$100.0 m****Project Description:**

Railroad track and signal improvements between Emeryville and Richmond, constructing new railroad track between Port of Oakland and Emeryville and grade separation structures in Richmond.

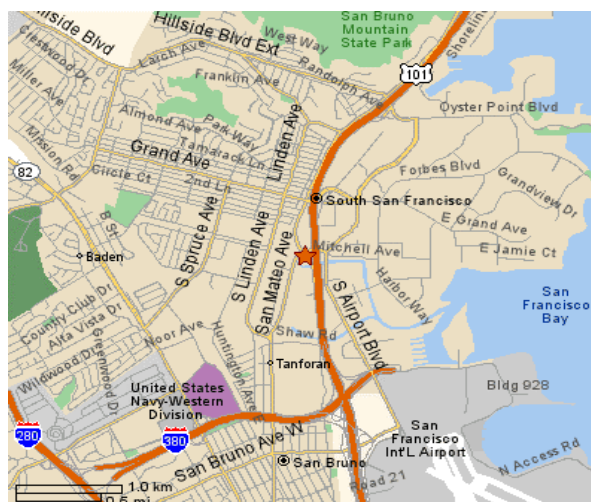
Related Freight/Roadway Statistics:**Congestion (2025 no build v/c ratio): 0.8 to 0.99 on I-80 between Emeryville and Richmond****Truck-Related Accidents: Not Applicable****Benefits of the Project:**

This project would augment rail access to the Port by providing opportunity and scope for growth. Considering that the corridor is shared by passenger (Capitol Corridor) and freight rail (UPRR and Burlington Northern –Santa Fe Railroad (BNSF)), the project would increase efficiency and reliability of both and provide a modal option in a corridor with high truck volumes and congestion.

San Mateo County**Project ID#: 279****Project Title: U.S. 101/Produce Ave Interchange Project****Sponsor: South San Francisco****Project Cost: \$77.3m****Project Description:**

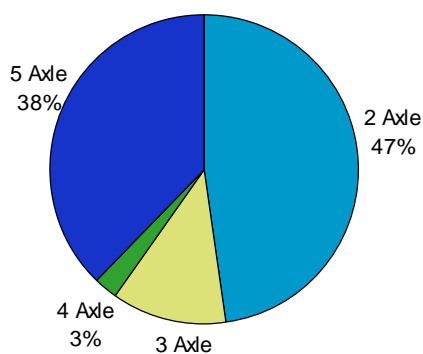
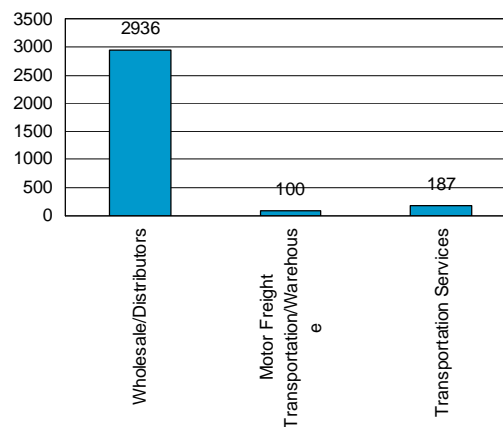
Construct a new interchange to replace the Produce Avenue on-/off-ramps from Highway 101. The South Airport Blvd hook ramps to U.S. 101 at Wondercolor Lane would also be incorporated in the project.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
Ü	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

14495 Total Trucks/day

6.5 % of Total Traffic

**Freight Reliant Businesses****Congestion (2025 no build v/c ratio): Not Available****Truck-Related Accidents: Not Available****Benefits of the Project:**

The project would improve safety and benefit access to the produce market in Oakland in an area with high truck volumes and more than 3,000 freight-reliant businesses.

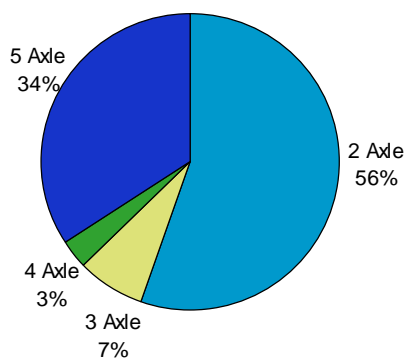
San Mateo County**Project ID#: 284****Project Title: Route 92 Slow Vehicle Lane – Route 280 to Route 35****Sponsor: San Mateo County Transportation Authority****Project Cost: \$64.0m****Project Description:****Add an uphill climbing lane from Highway 280 to Route 35.**

Freight Issue(s) Addressed	
ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

1837 Total Trucks/day

2.24 % of Total Traffic

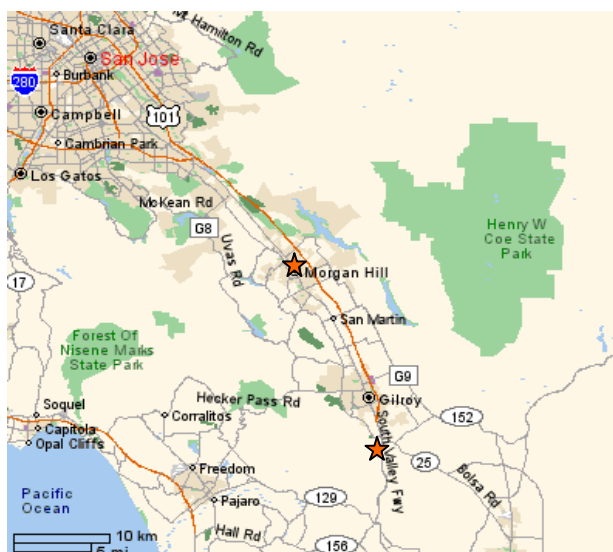
**Congestion (2025 no build v/c ratio):** >0.99 for 60% of area**Truck-Related Accidents:** Not Available**Benefits of the Project:**

Given that trucks can occupy up to four times the capacity of automobiles while ascending a steep grade, a climbing lane would benefit capacity in a location forecast to be extremely congested in 2025, as well as improve safety.

Santa Clara County**Project ID#: 140****Project Title: U.S. 101 Widening from Cochrane Rd to Monterey Highway (includes 2 new interchanges)****Sponsor: Santa Clara Valley Transportation Authority (VTA)****Project Cost: \$259.6 m****Project Description:**

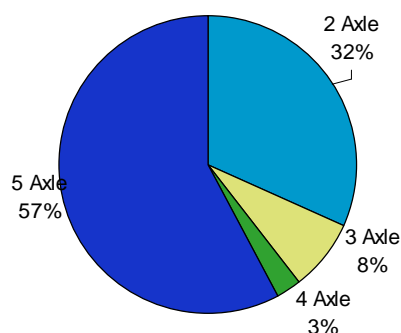
Widen U.S. 101 between Cochrane Road to Monterey Highway from six to eight lanes and construct two new interchanges at Tennant and Buena Vista.

Freight Issue(s) Addressed	
ü	Intra-Regional Corridor
	Inter-Regional Corridor
ü	Access to Int'l Gateway

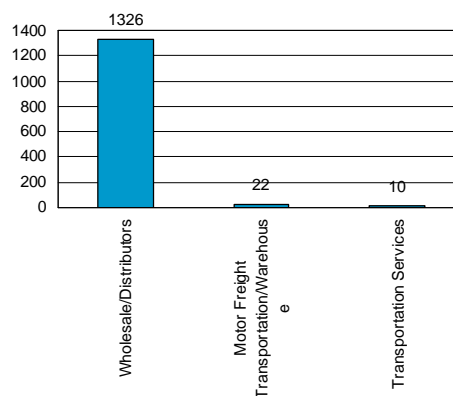
**Related Freight/Roadway Statistics:**

8678 Total Trucks/day

11.57 % of Total Traffic



Freight Reliant Businesses

**Congestion (2025 no build v/c ratio):** 0.8-0.9 for 20% of the area and 0.9-0.99 for 30% of the area**Truck-Related Accidents:** Not Available**Benefits of the Project:**

Rt-101 is an important route as a southern gateway from the Central Valley into the Bay Area. Given the high-truck volumes and large proportion of 5-axle large trucks, this project would improve freight efficiency.

Solano County**Project ID#: 304****Project Title: Complete I-80/I-680/SR 12 Interchange Improvements****Sponsor: Solano County Transportation Authority****Project Cost: \$509.5 m****Project Description:**

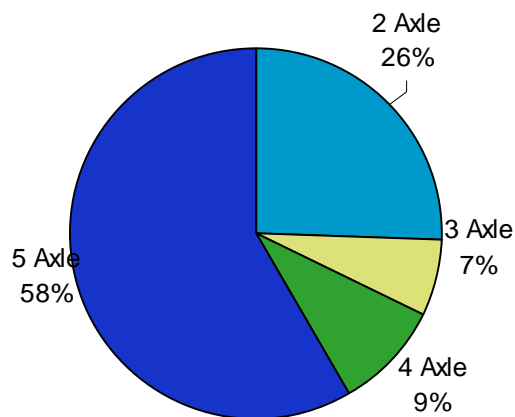
Complete improvements to the I-80/I-680/ SR 12 interchange and be complementary to other projects to braid ramps, add auxiliary lanes, add HOV lanes, and relocate truck scales. Project would widen the mainline to a total of seven lanes in each direction with parallel collector-distributor roads.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
Ü	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

20077 Total Trucks/day

11.22 % of Total Traffic

**Congestion (2025 no build v/c ratio):**

0.8 and 0.99 on I-80 between SR 12 East and SR 12 West

Truck-Related Accidents:

Not Available

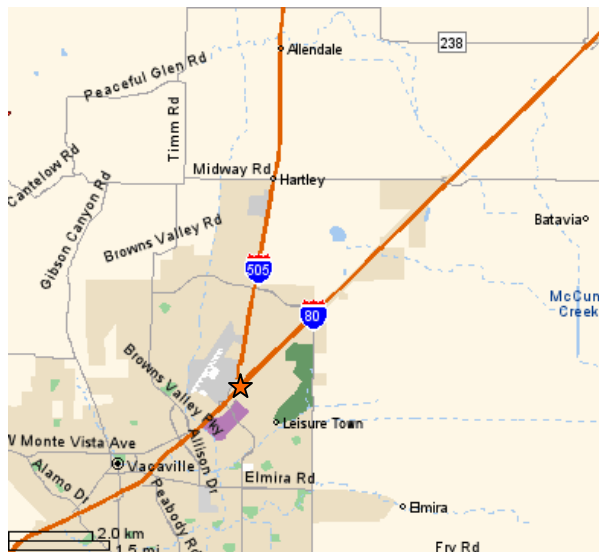
Benefits of the Project:

The high-truck volumes on this corridor, coupled with a large proportion of large 5-axle trucks, make this project beneficial to safety, capacity, and efficient movement of trucks.

Solano County**Project ID#: 312****Project Title: I-505 Weave Correction Project****Sponsor: Solano County Transportation Authority****Project Cost: \$8.5428 m****Project Description:**

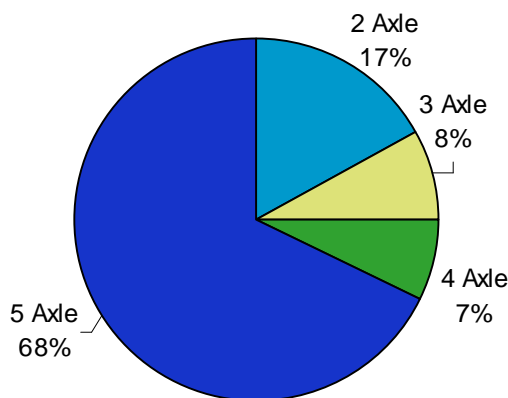
Realign the southbound connector from I-505 to westbound I-80, install an auxiliary lane between the southbound I-505 on ramp and the East Monte Vista off-ramp, and close the short gap in the fourth westbound lane of I-80 just east of I-505.

Freight Issue(s) Addressed	
Ü	Intra-Regional Corridor
	Inter-Regional Corridor
	Access to Int'l Gateway

**Related Freight/Roadway Statistics:**

2995 Total Trucks/day

11.52 % of Total Traffic

**Congestion (2025 no build v/c ratio):** < 0.8**Truck-Related Accidents:** Not available**Benefits of the Project:**

The project will improve the safety and efficiency of truck movement in an area with large numbers of trucks, especially larger trucks. It will also improve access to I-80 and the industrial areas at Fairfield in a county where a large portion of the economy is supported by freight-reliant businesses.

Attachment 2. Introduction to the Goods Movement Study

Freight Transportation always has been a critical element of the infrastructure that supports economic vitality and the quality of life in the Bay Area. The San Francisco Bay Area Regional Goods Movement Study attempts to understand the system, its performance in the regional economy and recommend appropriate policy and strategies. Phase I of the study evaluated the existing goods movement system and its relation to the economy, and identified areas for further evaluation in Phase 2 of the study. The study's Phase 2 is currently underway.

Critical Issues

The following four broad issue areas have emerged as critical to the development of a goods movement system in the Bay Area:

1. **The need to preserve mobility and safety in Intra-regional corridors.** A significant fraction of regional goods movement is associated with providing goods and services to the consumer markets in the region. I-880 plays a major role in this system serving the largest share of intra-regional flows between Santa Clara, Alameda, and Contra Costa Counties. U.S. 101 is a second major intra-regional corridor with secondary roles played by I-80 and I-680.
2. **Problems in Inter-regional corridors.** Inter-regional corridors like I-80 and I-580 serve two distinct functions in the Bay Area goods movement system. First, these corridors provide a critical trade link between this region and the rest of the country. Second, these corridors carry consumer goods for distribution in the region. This second trade linkage has a particularly important component between the Bay Area and the northern San Joaquin Valley.
3. **Need for access improvements and constrained growth opportunities around the international gateways.** The air and sea ports in the Bay Area suffer from congested access routes with limited availability of alternative modes with congestion on I-880 being a major issue for Port of Oakland access. Additionally, real estate markets are pushing land to higher value uses and land use controls are making it very difficult for port-related businesses to remain in proximity to the Port thereby constraining port growth.
4. **Land use and real estate market problems that are leading to lack of space for expansion of goods movement businesses, and ultimately leading to higher costs, more congestion, and higher emissions associated with trucks operating from more remote locations.** Growing conflicts with expanding residential and commercial development have created a serious problem for goods movement businesses. Movement of these businesses to outlying locations is likely to increase truck VMT, diesel emissions, and the cost of goods.

Potential Strategies

In order to develop a set of potential strategies for addressing the major goods movement issues in the region, two approaches were used. First, a high-level strategic look at the regional goods movement system is being employed to develop “Big Tent” strategies that tie multiple projects together and that identify major projects that may cut across county and even regional boundaries. This high-level strategic thinking emphasizes the major themes that dominate goods movement in the region and tells this story in a way that may have more appeal for state and federal funding agencies.

The second approach is a bottoms up approach. It recognizes that the discretionary spending for new projects in the region is limited and that the County Congestion Management Agencies (CMAs) play a key role in programming these limited funds. Therefore, the study looked at the projects that are coming up through the conventional CMA process with goods movement benefits. By linking these projects, as appropriate, to the higher-level Big Tent strategies, a comprehensive goods movement plan can be developed.

The comprehensive multimodal plan integrating the two approaches described above is summarized in Table 1.

Table 1. Bay Area Freight Gateway System Plan

Theme	Implementation Strategy
Need for a Regional Air Cargo Plan	Development of a land use/industrial land preservation plan for the airports.
	Improved cross-bay connections among the airports and between shippers concentrated in the South Bay/East Bay and the international and domestic air cargo facilities.
	Direct access improvements at OAK.
	Coordinated regional air cargo plan.
I-880 corridor plan	Seaport access improvements, including access improvements on I-880 interchanges, ITS improvements including improved incident management, centrally controlled ramp metering, and ATIS systems to improve operations at and near the port.
	OAK freight-friendly access improvements including improvements at I-880 interchanges, and additional roads to access under-developed areas of the airport.
	Freight-friendly land use in the corridor to designate key locations for industrial use including warehouses and distribution centers within the inner Bay Area to be coordinated with Smart Growth strategies.
	Managed lanes for long-distance truck trips to improve safety and efficiency of through truck movement in the Bay Area
	Continuity in truck lanes throughout critical corridors to improve safety by decreasing unsafe weaving conflicts with passenger traffic
	Improvements to alternative facilities and continuity of truck routes including the development of alternate arterial reliever routes in highly congested locations especially along I-880

Table 1. Bay Area Freight Gateway System Plan (continued)

Theme	Implementation Strategy
Inter-regional gateway strategy	I-580 improvements to facilitate safe and efficient truck movements including climbing lanes and truck-only lanes
	I-80 improvements to augment capacity in congested locations and improve operationally deficient interchanges for safety
	SR 152, SR 25, and SR 156 improvements to improve access to I-580 and SJC through interchange improvements and capacity increase on selected segments
	SR 4 and SR 84 alignment and operational improvements that allow for the handling of east-west traffic improving the connection between the Bay Area and the Central Valley and the national interstate system
	Alternative mode improvements including inland rail and barge options to relieve congested freeways
Bay Area Freight Gateway	Improvements to the multimodal gateway facilities
	Elements of the I-880 corridor plan that focus on the area from Richmond to the I-238/I-580 connection
	Cross-bay ferry system plan
	Improvements proposed for the I-580 plan above
	Improvements to the short-haul intermodal connections to the San Joaquin Valley
	ITS/Commercial Vehicle Operations (CVO) systems linked to cargo visibility and security systems around the Port of Oakland